



EYFS – Curricular Goal Milestones linked to Computing	
6. Investigate and Explore. Observe, ask questions, discuss and identify patterns.	Final Milestone -Children have a good understanding of the wider world and changes both now and in the past. They use a wide range of vocabulary to explain and describe similarities and differences and draw on their experiences.

Skill domains:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Digital Literacy</b></p> <p><i>Becoming a responsible digital citizen - understanding digital footprint and how to use and navigate internet safely.</i></p> <p>Online Safety/ Digital awareness &amp; communication</p> <p>(yellow on long term plan)</p>	<p>I can say what technology is. I can say what examples of technology are in school. I can say what examples of technology are at home. I know that a chair uses old technology and a smart phone uses new technology. I can keep my login information safe. I can save my work in a safe place such as 'My Work' folder.</p>	<p>I understand that my creations such as programs in 2Code, need similar skills to the adult world. e.g., The program used for collecting money for school trips. I can see where technology is used at school such as in the office or canteen. I know the consequences of not searching online safely. I can report unkind behaviour and things that upset me online, to a trusted adult. I can share work and communicate electronically – for example using 2Email or the display boards I can find information I need using a search engine</p>	<p>I can create a secure password. I can explain the importance of having a secure password and not sharing it with others. I can explain the negative consequences of not keeping passwords safe and secure. I understand the importance of keeping safe online and behaving respectfully. I can report unacceptable content and contact online in more than one way to a trusted adult. I can use communication tools such as 2Email respectfully and use good etiquette.</p>	<p>I have a good understanding of the online safety rules we learn at school. I can demonstrate how to use different online technologies safely. I can demonstrate how to use a few different online services safely. I know I have a right to privacy both on and offline. I recognise that my wellbeing can be affected by how I use technology. I can report with ease any concerns with content and contact online and know immediate strategies to keep safe.</p>	<p>I have a secure knowledge of online safety rules taught at school. I can demonstrate the safe and respectful use of different online technologies and online services. I always relate appropriate online behaviour to my right to have personal privacy. I know how to not let my mental wellbeing or others be affected by use of online technologies and services.</p>	<p>I can demonstrate safe and respectful use of a range of different technologies and online services. I can identify more discrete inappropriate behaviours online. For example, someone who may be trying to groom me or someone else. I can use critical thinking to help me stay safe online. I know the value of protecting my privacy and others online.</p>
<p><b>Information Technology</b></p> <p><i>Using Computers in a purposeful way – research, create, edit, and manage files.</i></p> <p>Data Handling/ Creating Digital Media and Content/ Presenting Information</p> <p>(blue on long term plan)</p>	<p>I can sort sound, pictures and text. I can add sound, pictures and text to a program such as 2Create a Story I can change content on a file such as text, sound and images. I can name my work. I can save my work. I can find my work</p>	<p>I can organise data – for example, using a database such as 2Investigate. I can find data using specific searches – for example, using 2Investigate. I can use several programs to organise information – for example, using binary trees such as 2Question or spreadsheets such as 2Calculate. I can edit digital data such as data in music composition software like 2Sequence. I can name, save and find my work. I can include photos, text and sound in my creations.</p>	<p>I can carry out searches to find digital content on a range of online systems, such as within Purple Mash or on an Internet search engine. I can collect data and input it into software. I can analyse data using features within software to help such as, formula in 2Calculate (spreadsheets). I can present data and information using different software such as 2Question (branching database) 2,Graph (graphing tool) or 2Calculate (spreadsheets) I can create purposeful (appropriate) content and attach this to emails I can consider what the most appropriate software to use when given a task by my teacher. (Across units)</p>	<p>I understand the purpose of a search engine and the main features within it. I can look at information on a webpage and make predictions about the accuracy of information contained within it. I can create and improve my solutions to a problem based on feedback. For example, create a program I can review solutions that others have created, using a checklist of criteria. I can work collaboratively to create content and solutions I can share digital content using a variety of applications such as: 2Blog, 2Email and Display Boards. (Across units)</p>	<p>I can search precisely when using a search engine. For example, I know I can add additional words or removes words to help find better results. I can explain in detail how accurate, safe and reliable the content is on a webpage. I can make appropriate improvements to digital work I have created. I can comment on how successful a digital solution is that I have created. I can work collaboratively with others creating solutions to problems using appropriate software</p>	<p>I can use filters when searching for digital content. I can explain in detail how accurate and reliable a webpage and its content is. I can compare a range of digital content sources and rate them in terms of content quality and accuracy. I can consider the intended audience carefully when I design and make digital content. I can design and create my own online blogs. I can use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements</p>
<p><b>Computer Science</b></p> <p><i>Understanding how Computers and networks work, learning foundation principles of Computer Programming.</i></p> <p>Computer programming and game creation</p> <p>How computers/networks work</p> <p>(red on long term plan)</p>	<p>I can explain that an algorithm is a set of instructions I know that a computer program turns an algorithm into code that the computer can understand. I can work out what is wrong when the steps are out of order in instructions I can try and fix my code if it isn't working properly I can make good guesses of what is going to happen in a program</p>	<p>I can explain an algorithm is a set of instructions to complete a task. I know I need to carefully plan my algorithm so it will work when I make it into code. I can design a simple program using 2Code that achieves a purpose. I can find and correct some errors in my program. I can say what will happen in a Program. I can spot something in a program that has an action or effect (does something).</p>	<p>I can base a written algorithm for a program upon a real-life situation. I can design an algorithm carefully, thinking about what I want the program to do and how I could turn my algorithm into code. I am able to design a program thinking logically about the sequence of steps required. I can experiment with timers in my programs. I can experiment with the effect of using repeat commands. I can identify the difference in using the effect of a timer or repeat command in my code I can identify an error in my program and fix it I can read programs with several steps and predict what it will do. I can identify different ways that the Internet can be used for communication. I can use email such as 2Email to respond to others appropriately and attach files. To understand the different parts that make up a desktop computer.</p>	<p>I can turn a real-life situation to solve into an algorithm, using a design that shows how I can accomplish this in code. I can use repetition in my code. For example, using a loop that continues until a condition is met such as the correct answer being entered. I can use timers within my program designs more accurately to create repetition effects. I can use selection (decision) in my programming. For example, using an 'if statement' for a question being asked and the program takes one of two paths. I can use variables within my program and know how to change the value of variables. I can use the user inputs and output features within my program, such as 'Print to screen' I can identify errors in my code by using different methods, such as stepping through lines of code and fixing them. I can read programs that contain several steps and predict the outcomes with increasing accuracy. I recognise the main component parts of hardware which allow computers to join and form a network. I understand that network and communication components can be found in many different devices which allow them to join the internet.</p>	<p>I can make more complex real-life problems into algorithms for a program. I can test and debug my programs as I work. I can convert (translate) algorithms that contain sequence, selection and repetition into code that works. I can use sequence, selection, repetition, and some other coding structures in my code I can organise my code carefully for example, naming variables and using tabs. I know this will help me debug more efficiently. I can use logical methods to identify the cause of any bug with support to identify the specific line of code. I know the importance of computer networks and how they help solve problems and enhance communication I recognise the main dangers that can be perpetuated via computer networks. I can explain what personal information is and know strategies for keeping this safe. I can use the most appropriate form of online communication according to the digital content. For example, use 2Email, 2Blog and Display Boards.</p>	<p>I can turn a complex programming task into an algorithm. I can identify the important aspects of a programming task (abstraction). I can decompose important aspects of a programming task in a logical way, identifying appropriate coding structures that would work. I can test and debug my program as I work on it and use logical methods to identify a cause of a bug. I can identify a specific line of code that is causing a problem in my program and attempt a fix. I can translate algorithms that include sequence, selection and repetition into code and nest these structures within each other. I can use inputs and outputs within my coded programs such as sound, movement and buttons and represent the state of an object. I can interpret (understand) a program in parts and can make logical attempts to put the separate parts together in an algorithm to explain the program as a whole. I can explain the difference between the Internet and the World Wide Web. I can explain what a WAN and LAN is and describe the process of how access to the internet in school is possible.</p>

